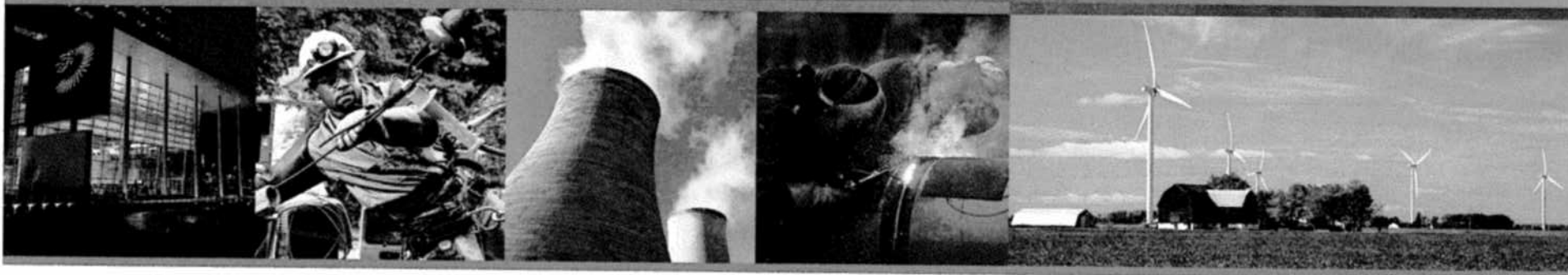




DTE Energy®

Ice Storm – December 2013
House Energy and Technology Committee

Trevor F. Lauer
Vice President of Distribution Operations
January 21, 2014



Overview or Section Outline



- **DTE Electric storm preparedness**
- **Weather and it's impact on our customers**
- **DTE Electric restoration performance**
- **DTE Electric customer communication**
- **Lessons learned**

DTE Electric preparations in advance of the storm



ACTIVITIES PRIOR TO STORM

Operational Readiness

MANPOWER

- Mobilized more than 3000 manpower resources
- Secured approximately 600 linemen in addition to our 400 DTE linemen (~1,000 total)
- Notified all employees to stand by to perform assignments as needed

LOGISTICS

- Opened crew mobilization sites in all 4 affected areas
- Pre-staged equipment and materials
- Staffed DTE Energy Storm Emergency Headquarters
- Communicated DTE's willingness to assist, to county road commissions

Customer Communications

- Conducted 16 radio and TV interviews – 20th and 21st December
- Alerted and prepared customers via email pushes, social media, and mass media

Weather patterns caused prolonged icy conditions on trees and wires



Oakland / Lapeer Counties

December	22	23	24	25	26	27	28	29
Min temp	26	20	0	9	21	26	32	19
Max temp	33	27	20	25	27	39	48	43
Snow	0.1"	0.8"	2.5"	1.8"	2.2"	0"	0"	0"
Ice (cumulative)	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	0"	0"

DTE Line truck

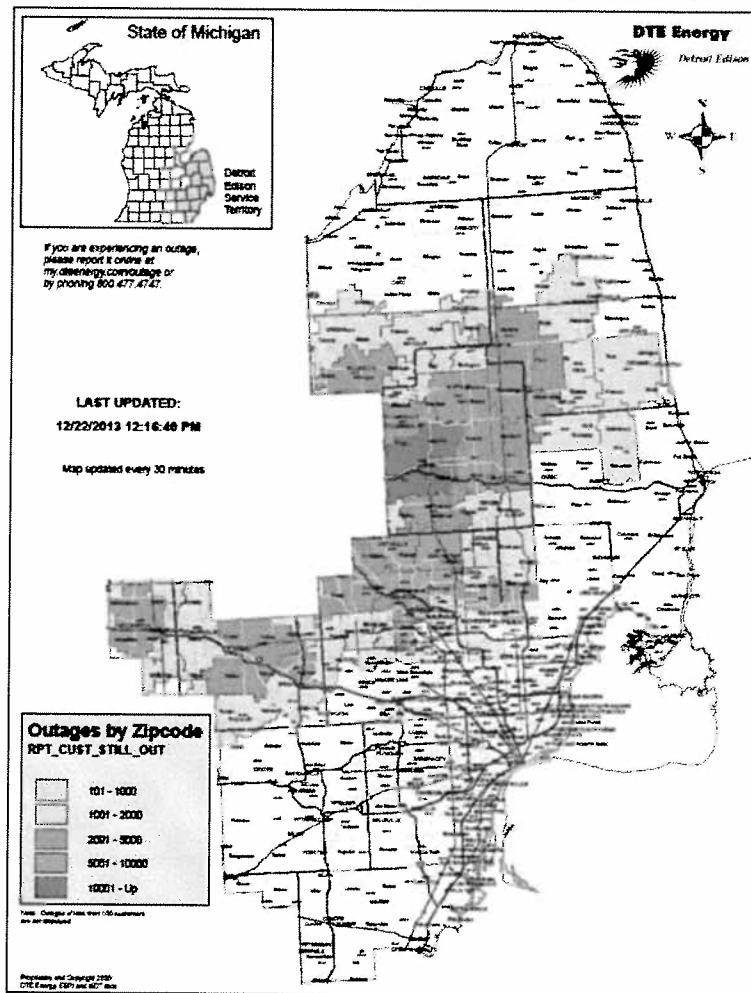


Tree falling in front of a DTE truck caused additional outages after restoration had been completed

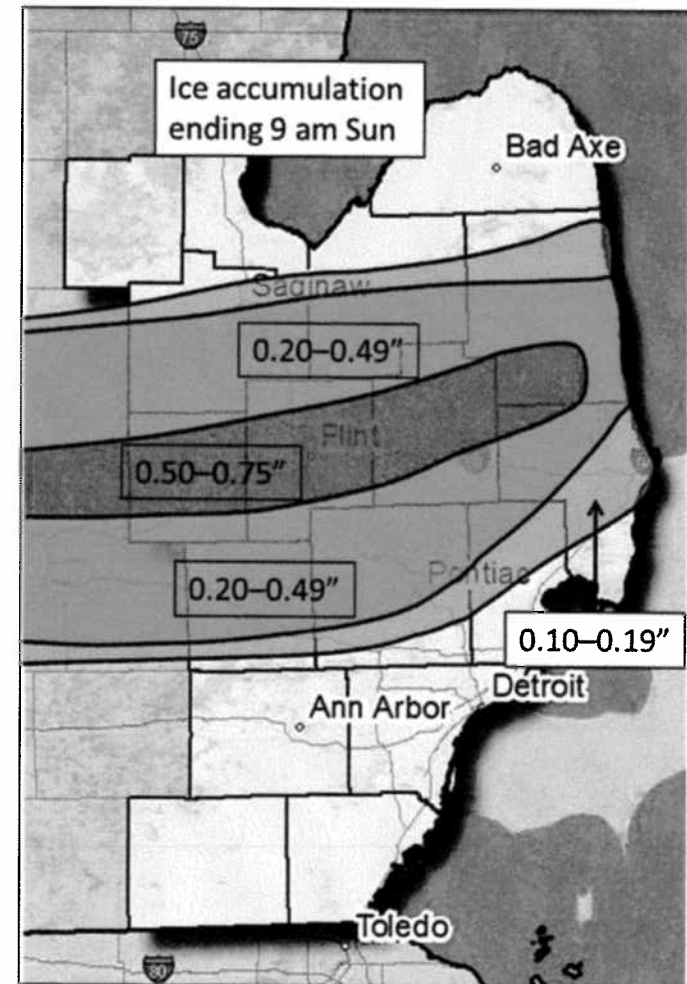


Ice covered power lines

The damage to our system was concentrated in a tight North-South band



DTE Energy Zipcode Outage Map

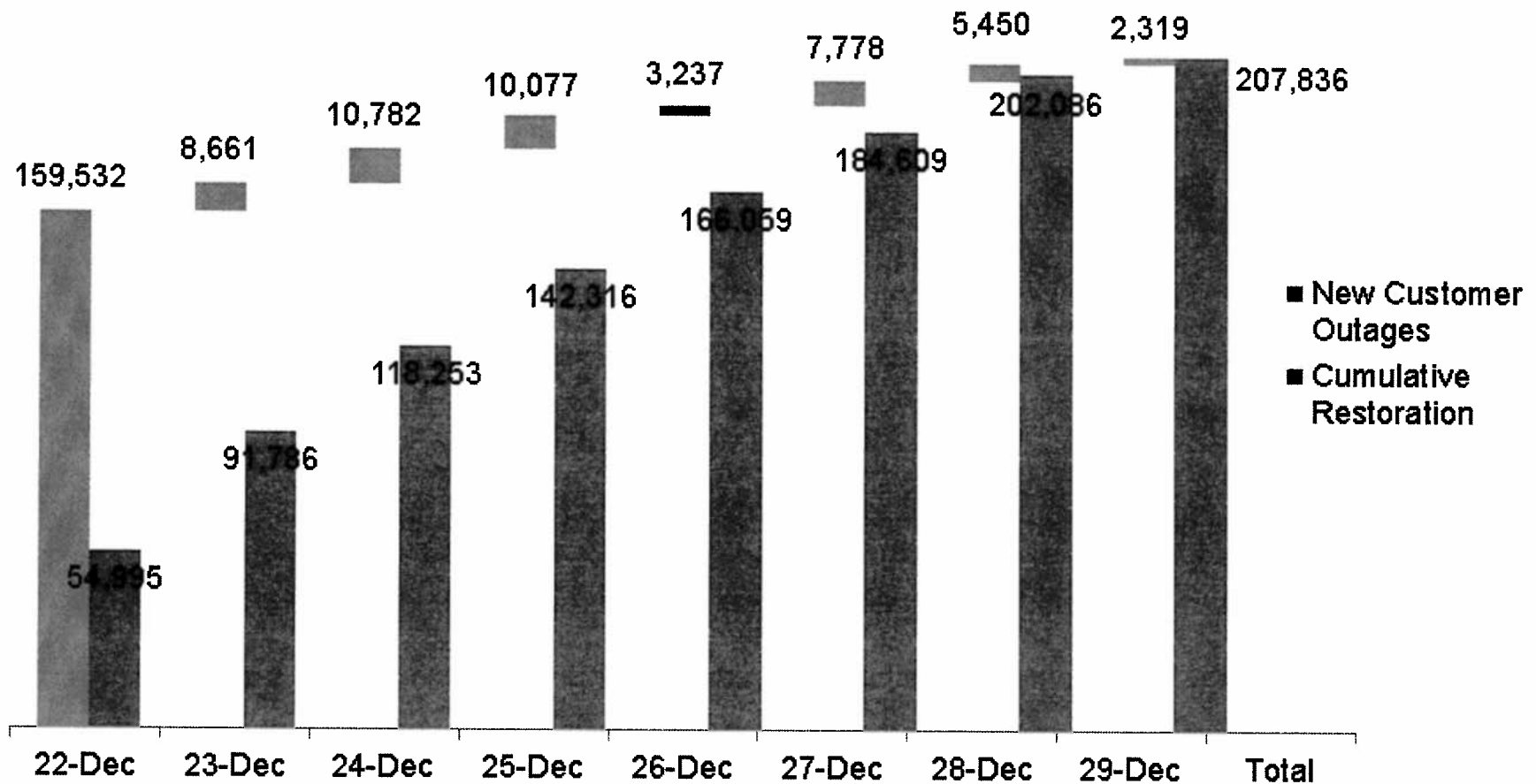


Total ice accumulation by 9 am December 22nd

Ice storms caused ongoing outages, slowing down restoration efforts



New Customer Outages and Restoration per day



Restoration took mobilizing significant manpower and resources



More than 3,000 people worked to restore power

1,000 overhead lineman

485 forestry personnel

595 public safety & service restoration personnel

1,500 additional support personnel



BEFORE

Work Performed

2,300 wire downs

206 poles replaced

19 miles of wire replaced

44 transformers replaced



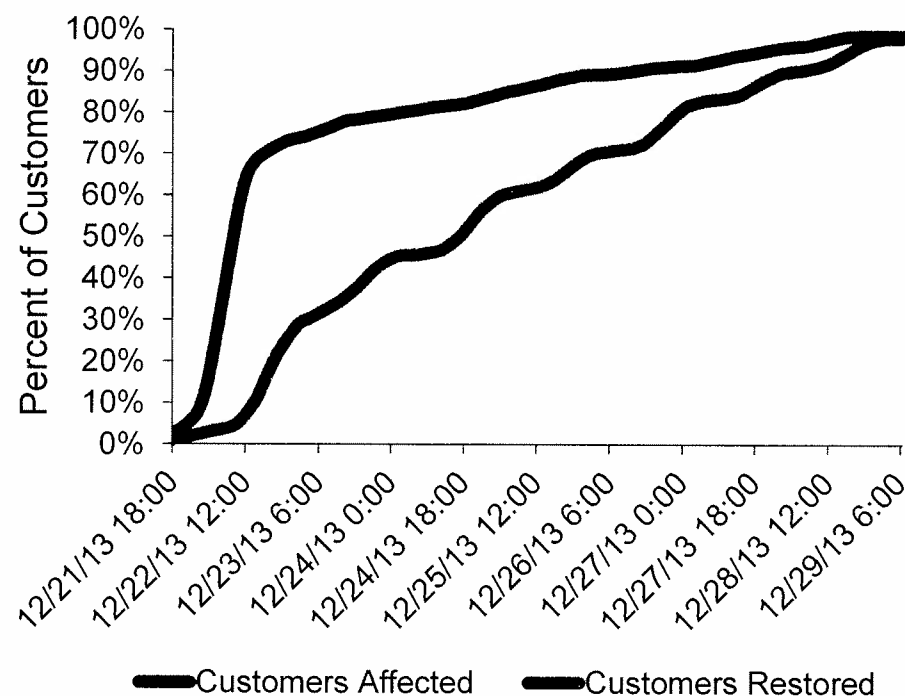
AFTER

Safety: no customer injuries, 10 auto accidents, and 1 OSHA Recordable injury

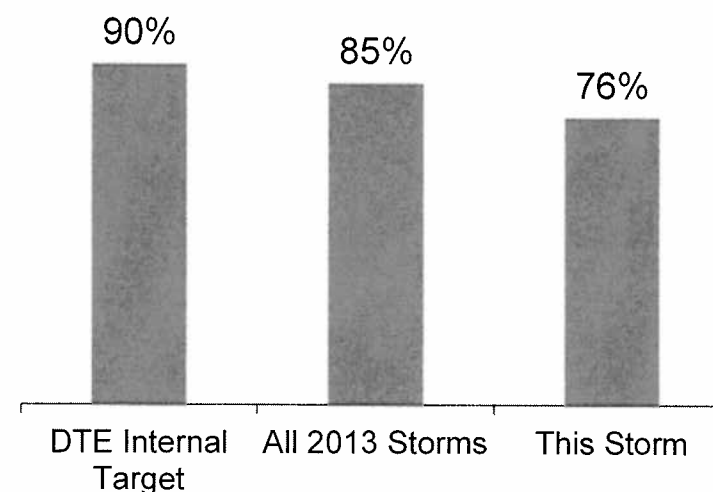
Customer restoration rates and customer estimate performance



- Approximately 210,000 customers impacted
- Last customer restored at 6 pm on Dec 29



Customer Restoration Estimate Performance



Challenges:

- Ongoing damage due to ice build-up
- Under-estimation of damage

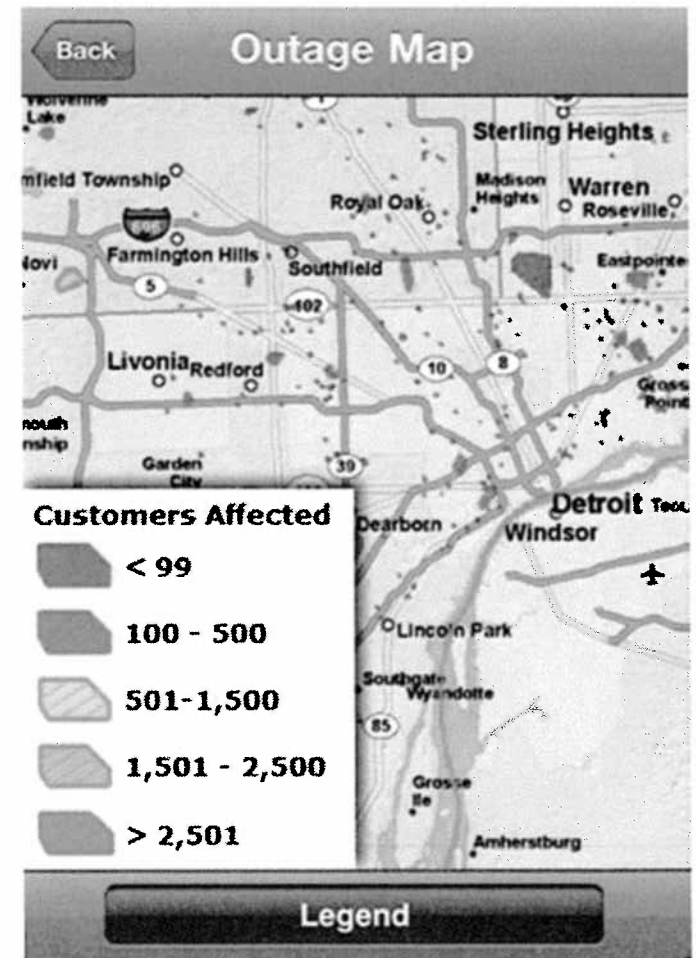
We proactively communicated with our customers, using all channels available



DTE Energy

Customer Interactions

Customer Calls Received	250,000
Proactive Calls to Customers by DTE	205,000
Outage Map Views	672,000
Mobile App Usage	252,000
Average Speed of Answer	35 seconds

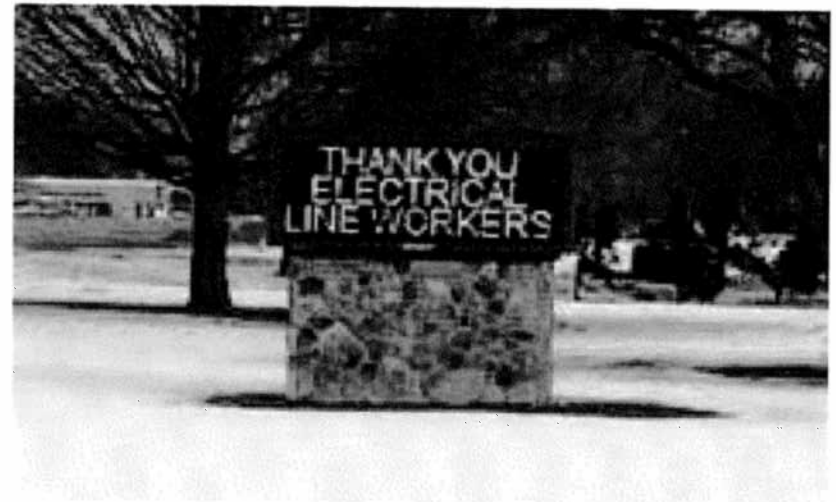


DTE Energy Mobile Outage App

Lessons learned



- Improve our ability to give our customers accurate restoration estimates
- Develop an approach to address hazardous trees outside our easements
- Continue our Advanced Metering Infrastructure (AMI) deployment throughout our service territory



A church, in Lapeer, offers thanks to DTE Energy crews